

# MISSOURI Woodpeckers

by Amy Salveter



Seven species of woodpeckers eat insect pests and keep our forests healthy.



**A**lmost every place on earth where there are trees—except Australia—there are woodpeckers. Remarkably, there are about 215 species of woodpeckers worldwide. Depending on the time of year, Missouri is home to seven species of woodpeckers. The hairy, downy, pileated and red-bellied woodpeckers reside here throughout the year. Northern flickers may migrate southward in the winter, and red-headed woodpeckers will if there aren't enough acorns to eat. Yellow-bellied sapsuckers don't breed in Missouri, but they stay here during the winter months.



The bright colors and patterns of woodpeckers' feathers are distinctive. Contrasting brown, black and white colors mixed with barring and spotting patterns are typical. Because it takes some experience to recognize their individual calls, learning to identify plumage colors and patterns relative to body size is the best way to tell one species from another.

Woodpeckers on the wing, such as the pileated, red-headed and northern flicker, reveal patches on the wings, tail or rump that can help you identify them. Males often show more red on the head than females, but for some species, like the red-headed woodpecker, it is impossible to distinguish between the sexes.

Woodpeckers are uniquely adapted for a life of climbing and pecking—or drumming, as it is called—on trees. Their specialized zygodactyl feet, with two toes pointing forward and two back, help them get a firm grip on vertical surfaces. They use stiff tail feathers to brace themselves as they scoot up and down trees.

When woodpeckers drum, they're doing more than just making noise. They are using the sound to help locate grubs and insects inside the wood—just as you might tap a hammer along a wall to find the hidden stud. Woodpeckers can hear when an insect is hiding beneath bark or in a hollow part of the tree. Then they use their heavy, chisel-shaped bill to peck beneath the tree bark, but it takes more than a sharp bill to do the job. Powerful neck muscles drive the blows, and their thick but spongy skull is designed to spread and absorb the shock of repeated pounding and to protect the brain.

Woodpeckers have long tongues supported by bones that wrap over the top of the skull and attach in their nostrils. The bristle tip at the end of their tongue helps them fish out insects hiding in the deep cracks of trees.

Trees and forests stay healthier because of woodpeckers' eating habits. Most of their diet consists of insects, many of which are potential timber pests. Woodpeckers find insects

on the trunks and limbs of trees by sight, or by probing in crevices, scaling off bits of bark or hammering deep into the wood.

Nuts and fruits also comprise an important part of their diet. Most woodpeckers excavate nest cavities and forage for wood-boring insects in trees that are already dead, dying or diseased. Some species, like the northern flicker, may feed on the

ground. Others, like the red-headed woodpecker, will catch insects in flight to feed their growing chicks.

All seven of our woodpeckers nest and roost in holes or cavities in trees that they usually excavate themselves. These cavities, pecked in dead or rotting wood, don't hurt the trees and provide important nesting sites for many other cavity users, including chickadees, tufted titmice, bluebirds, tree swallows, screech owls and flying squirrels.

Sometimes woodpeckers use existing cavities or nest boxes, but they generally prefer natural nest sites. Because the nest cavity provides a place to raise their young, woodpeckers don't need to carry in nest material like twigs or leaves. Instead, they line the bottom of the nest cavity with a few wood chips for the eggs to rest on.

All of our woodpeckers lay pure white eggs. They don't need any camouflaging patterns or colors—the nest cavity hides the eggs. When it's time to incubate eggs the female takes most of the day shift, and the male takes the night shift. Both parents share the responsibility of bringing food to young in the nest.

**W**oodpeckers communicate by means of displays, drumming and vocal calls. Male woodpeckers of most species proclaim their territories by drumming a loud rapid sequence on a dead branch or hollow tree. In some cases, they will drum on wood-sided houses, rain gutters or other metal surfaces. They can be discouraged with balloon scare-eyes or shiny, colorful streamers placed slightly above where the woodpecker is doing damage. A species that naturally has a loud voice will advertise its territory by calling, or by both calling and drumming. When females and males are pairing up during the mating season, they may drum back and forth to each other, duet style. Tapping on suitable nest sites is a ritual part of courtship for some species.

As a general rule, woodpeckers have many aggressive displays they use to defend their territories or feeding sites. Displays used by woodpeckers involve some kind of motion of the head, whether it be bowing, bobbing, turning side to



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Northern Flicker—male

*"... there are a whole genus of birds, called Pici mareii, or woodpeckers, that in like manner have a tongue which they can shoot forth to very great length, ending in a sharp stiff bony rib, dented on each side, and at pleasure thrust it deep into holes, clefts and crannies of trees, to stab and draw out cossi, or any other insects lurking there ..."*

—John Ray (1627-1705: author of the first formal classification of birds, *Ornithologiae*, published in 1676).

side or back and forth or pointing their bill up. It isn't uncommon to see their head feathers ruffled or their tail feathers and wings partially spread, making them appear larger. Many species of woodpeckers showing off for prospective mates flutter or float in flight.

There's a fine line between love and hate, as they use minor variations of their aggressive displays to court would-be mates. Initial encounters between males and females during the breeding season may appear hostile, but eventually the sexes become more tolerant of each other.

Nothing breaks the stillness of an Ozark forest like the raucous laughlike call of the pileated woodpecker. And who can

**Northern flickers are found throughout the state, but they tend to be more abundant near big rivers and reservoirs, where large dead or dying trees provide nesting sites.**

resist the adorable little downy woodpecker that makes regular appearances at backyard bird feeders? Encountering a mixed flock of woodpeckers and other birds busily foraging on leafless trees never fails to break up the monotony of a walk in the winter woods. Whether you see woodpeckers in small flocks, singly or in pairs, you'll be delighted by the wide variety of woodpeckers in Missouri throughout the seasons. ▲





Red-bellied Woodpecker—male

Red-bellied Woodpecker—female



Downy Woodpecker—female



Downy Woodpecker—male

Hairy Woodpecker—female



Hairy Woodpecker—male



Northern Flicker—female

A hairy woodpecker's bill is as long as its head is wide. ▶  
Downy woodpeckers have shorter bills. They also have two or more black bars on their white outer tail feathers. Hairy woodpeckers do not have black bars.

## Red-bellied Woodpecker

*Melanerpes carolinus*

### Hard-nosed facts:

- ▶ common statewide
- ▶ 9 inches in length
- ▶ eats nuts, fruits, tree sap and insects
- ▶ lives in open woodlands with snags and hollow trees
- ▶ nests in cavities excavated in snags; also uses poles and birdhouses
- ▶ female and male incubate four to five eggs for 12 to 14 days
- ▶ young fledge in 24 to 27 days
- ▶ call is a loud "chip-chip" or "churr" in a series or single notes
- ▶ drums (pecks) in bursts as long as one second

### Wood you care to know more?

- Red-bellied woodpeckers have a black-and-white barring pattern on their backs and wings.
- Males have a red patch on the backs of their necks that extends over the tops of their heads.
- Females lack red on the tops of their heads, but have a red patch on the backs of their necks.
- Red color on their bellies is faint.
- They breed in urban areas, as well as in heavily forested regions.
- Like several other woodpecker species, they hoard nuts, fruits and insects in their cavities and defend them within a territory. The fruits and insects are later fed to their young.
- They commonly visit feeders.

## Downy Woodpecker

*Picoides pubescens*

### Hard-nosed facts:

- ▶ common statewide
- ▶ 6 inches in length
- ▶ eats mostly insects; occasionally fruit, seeds and sap from sapsucker holes
- ▶ lives in all types of woodlands, from extensive mature forests to small urban woodlots
- ▶ nests in cavities excavated in snags

- or live trees
- ▶ female and male incubate four to five eggs for 12 days
- ▶ young fledge in 20 to 25 days
- ▶ call is a frequent high pitched "pik" and "ki-ki-ki-ki" rattling series
- ▶ drums frequently in 1- to 1.5-second bursts

### Wood you care to know more?

- Downies are the smallest of our resident woodpeckers.
- Usually recognized by their white backs and short bills, they also have two black bars on their white outer tail feathers.
- Males have a red patch on the backs of their heads that females lack.
- Each individual has a one-of-a-kind pattern on its head and back.
- They breed wherever there are trees with decayed branches suitable for nesting and foraging.
- Downies often camouflage the nest cavity entrance hole with moss, lichen and fungus.
- Woodland edge and wooded riparian corridors seem especially attractive to these birds.
- They sometimes uses birdhouses for roosting, but not for nesting.
- They commonly visit feeders.

## Hairy Woodpecker

*Picoides villosus*

### Hard-nosed facts:

- ▶ fairly common statewide
- ▶ 7.5 inches in length
- ▶ eats mostly insects; occasionally nuts (especially in winter) and sap from sapsucker holes
- ▶ lives in mature forests; also well-wooded towns and parks
- ▶ nests in cavities excavated in snags
- ▶ female and male incubate four eggs for 11 to 15 days
- ▶ young fledge in 28 to 30 days
- ▶ call is a sharp, loud "peek" or "keek-ik-ik-ik" rattling series
- ▶ drums frequently, but variably;

indistinguishable from downies, except at times by volume

### Wood you care to know more?

- Hairy woodpeckers look a lot like downy woodpeckers, but are slightly larger with longer bills.
- Males have a red patch on the backs of their heads that females lack.
- They often forage far from nest sites.
- Male and female pair bonds are strengthened through duet drumming.
- They commonly visit feeders.

## Northern Flicker

*Colaptes auratus*

### Hard-nosed facts:

- ▶ common statewide
- ▶ 12 inches in length
- ▶ eats mostly ants; occasionally seeds, nuts and grain
- ▶ lives in forests or in open areas with scattered trees
- ▶ nests in cavities excavated in snags, poles, posts, buildings, banks and haystacks
- ▶ female and male incubate five to eight eggs for 11 to 14 days
- ▶ young fledge in 25 to 28 days
- ▶ call is a long, loud, rapid "wik-wik-wik-wik" to "wik-a, wik-a" series
- ▶ drums softly in regular bursts

### Wood you care to know more?

- Flickers are the only woodpeckers that frequently feed on open ground.
- In flight, they flash bright yellow on their wings and tails, and white on their rumps.
- Males have black mustaches that females lack.
- They consume more ants than any other bird species.
- Their old nest cavities often are used by other species, such as squirrels, eastern screech-owls and American kestrels.
- Flickers are declining significantly in parts of their range.



# Pileated Woodpecker

*Dryocopus pileatus*

## Hard-nosed facts:

- ▶ uncommon and localized in the southern two-thirds of the state
- ▶ 17 inches in length
- ▶ eats mostly insects, some fruit, acorns, nuts and sap
- ▶ lives in deciduous and coniferous forests, woodlands, parks and suburbs
- ▶ nests in cavities excavated in snags (often barkless)
- ▶ female and male incubate four eggs for 15 to 18 days
- ▶ young fledge in 26 to 28 days
- ▶ call is slow, irregular or fast, from “a-wik, a-wik” to “wuk-wuk-wuk” series
- ▶ drums loud and steady

## Wood you care to know more?

- Pileated woodpeckers are the largest of our resident woodpeckers. They are crow-sized.
- They have large red crests, black backs and white underwing color.
- Males have red mustaches that females lack.
- They are most commonly seen flying across roads or pastures into an adjacent forest.
- Their undulating flight patterns distinguishes this species from crows.
- Pileated woodpecker nests usually are located in bottomlands or ravines in large-diameter trees.
- They may take as long as 30 days to excavate a cavity.
- The average territory size for one breeding pair in Missouri is 130 to 400 acres.

# Red-headed Woodpecker

*Melanerpes erythrocephalus*

## Hard-nosed facts:

- ▶ found statewide, but most abundant in northern half of state
- ▶ 9 inches long
- ▶ eats acorns, fruit, plant and animal material
- ▶ breeds in deciduous woodlands and open areas with scattered trees
- ▶ nests in cavities excavated in barkless snags or dead stubs on live trees; also uses natural cavities
- ▶ female and male incubate four to five eggs for 12 to 13 days
- ▶ young fledge in 27 to 30 days
- ▶ call is a loud “kweer” or “kwee-arr,” given in short series
- ▶ drums softly in short bursts

## Wood you care to know more?

- Red-headed woodpeckers are easy to identify because they are the only woodpeckers in the eastern United States with solid red heads.
- The males and females look alike.
- Their young have brown heads that don’t turn red until their first winter.
- Red-headed woodpeckers have tried to adapt to modern landscapes; as large, towering trees became scarce, this species switched to using utility poles and cavities in buildings for nest sites.
- Creosote-coated utility poles are lethal to eggs and young reared in them.
- In winter, some individuals will migrate southward to areas where there is an abundance of acorns, which they often seal in cavities with splinters of wood.
- This species is declining significantly in parts of its range.

# Yellow-bellied Sapsucker

*Sphyrapicus varius*

## Hard-nosed facts:

- ▶ uncommon winter resident
- ▶ 8.5 inches in length
- ▶ eats tree sap and cambium, fruit, berries, insects and nuts
- ▶ lives in mixed deciduous and coniferous forests
- ▶ nests in cavities excavated in live birch, poplar and aspen; often near water
- ▶ female and male incubate five to six eggs for 12 to 13 days
- ▶ young fledge in 25 to 29 days
- ▶ call is a “chur” or “quarr” given in series
- ▶ drums are usually two to three rapid beats followed by a series of double and triple beats within 2 to 4 seconds

## Wood you care to know more?

- Sapsuckers have white rumps and white patches on their shoulders.
- Males have a red throat that females lack.
- These woodpeckers have an odd habit of drilling tiny holes in tree bark in neatly spaced rows, and then returning to them to feed on the sap that oozes out or on insects attracted to the sap.
- They guard sap wells from other birds, squirrels and chipmunks by swooping and squawking at them.
- Sapsucker sap wells provide a food source for migrating hummingbirds.
- They drill wells and eat sap from 246 native tree species.
- The young learn sapsucking by observing their parents once they leave the nest.
- Male and female sapsuckers perform drumming duets to strengthen their courtship bond.



Yellow-bellied Sapsucker—immature male



Yellow-bellied Sapsucker—female



Red-headed Woodpecker

Missouri’s seven species of woodpeckers—colorful, sometimes noisy and diverse in lifestyles—are a treat for birdwatchers.



Yellow-bellied Sapsucker—immature



Pileated Woodpecker—male



Pileated Woodpecker—female



# ENDANGERED Woodpeckers

## Ivory-billed Woodpecker

*Campephilus principalis*

Extirpation means no longer living in a certain location or place. Extinction is forever. Extinct animals or plants no longer live anywhere. Until recently, the ivory-billed woodpecker was believed to be extinct. Recent sightings in Arkansas and Florida provide hope that this magnificent species still survives in remote forested swamps of the southeastern United States. However, no verifiable evidence documents their presence.

In the United States, extensive logging of bottomland and virgin cypress forests during the late 1800s and early 1900s led to the demise of the ivory-billed woodpecker, which once lived in southeastern Missouri. The species decline was especially swift because a single breeding pair needs about three square miles of undisturbed forest for its territory.

Wood-boring beetles and grubs that infested dead and dying trees were the ivory-bill's principal foods. The loud, excited "yamp, yamp, yamp" calls it made were similar to the sound produced by a clarinet mouthpiece. It is unlikely that sound ever will be heard again in the United States.

Our national will to save the ivory-billed woodpecker wasn't strong enough in 1948, when the last mature forest that supported these birds along the Tensas River in Louisiana was cleared for agriculture.



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## Red-cockaded Woodpecker

*Picoides borealis*

Red-cockaded woodpeckers are somewhat different from other North American woodpeckers because they live in family groups called clans. The clans are composed of a mated pair, their offspring of the year and, occasionally, unmated male helpers. This amounts to a cooperative breeding arrangement where the clan excavates cavities in a cluster of trees for nest and roost sites and vigorously defends a 40- to 80-acre territory.

It takes two years or more to excavate a cavity because the building sites are always living pine trees, which have much harder wood than dead and decaying trees.

Above and below each cavity the birds also excavate tiny holes—resin wells—from which pine resin flows. The oozing, sticky resin helps keep climbing black rat snakes from reaching their cavities and preying on eggs and young. The advantage of all this hard work is that cavities excavated in living trees can last decades.

This southeastern U.S. woodpecker depends on open canopied, mature pine forests that are periodically thinned by fire. Populations of red-cockaded woodpeckers have been vulnerable to elimination, fragmentation or modification of those forests by people.

The species was extirpated from Missouri because wild fires were suppressed, and virgin short-leaf pine forests of the southern Ozarks were logged in the early 1900s.

The last reported red-cockaded woodpecker colony disappeared shortly after the last stand of virgin short-leaf pine was cut in the spring of 1946 along Highway 19, just south of Round Spring in Shannon County. The closest population to Missouri today lives in the western Ouachita region of Arkansas.



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## HELPING Woodpeckers

There are a few basic things urban and rural landowners can do to provide places for woodpeckers to feed and nest:

- ▶ **Don't cut down snags** (standing dead or dying trees) that provide insect food and places to roost and nest.
- ▶ **Don't prune diseased** or dead tree limbs if it's safe to leave them. They also provide insect food and places to excavate cavities.
- ▶ **Living trees provide** replacements for snags, which will eventually fall over and decompose. Three snags or more per acre should be left standing.
- ▶ **Let large logs lie.** They provide habitat for the insects that woodpeckers eat.
- ▶ **Some species will** make use of nest boxes if wood chips—not sawdust—are provided for them in the cavity and placed in a wooded location.
- ▶ **Destroy the nests** of starlings and house sparrows. These non-native birds often take over the freshly excavated nest cavities of woodpeckers.
- ▶ **Place suet**, which offers a source of quick energy, in small wire cages, nylon mesh bags or a short section of log drilled with several 1-inch-diameter holes. Hang or attach to the side of a tree or pole. **Note:** suet becomes rancid and harmful to birds in temperatures higher than 70 degrees.
- ▶ **Black oil sunflower** seed is consumed out of feeders by some woodpecker species.
- ▶ **Landscape your yard** with native trees, shrubs and vines—especially nut- and fruit-bearing species.